

# MPTKR-I

The MPTKR-I pump is a highly efficient chopper pump made entirely of acid-proof steel. It is ideal for aggressive liquids with a low or high PH value, as well as liquids with a high dry matter content.

All MPTKR-I pumps can be equipped with a knife system at the inlet to the pump, which can ensure problem-free operations under conditions where many other pumps have problems with clogging.

## APPLICATION EXAMPLES

- ▶ Chemical industry
- ▶ Paper industry
- ▶ Food industry
- ▶ Biogas plants
- ▶ Pumping abrasive or aggressive l



## PUMP RPM

- 1,800 rpm
- 3,600 rpm

## MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron AISI A48-40B
Pump housing	Cast iron CF-8M
Pump impeller	Cast iron CF-8M
Pump shaft	AISI 316
Bolts	Steel AISI 316
Sealing system	Mechanical shaft seals: silicon carbide/silicon carbide
Knife system	Steel AISI 316 (*)
Extended knife system	Steel AISI 316 (optional)
Oil type	15W-40 Vario HDX (with moisture detection)

(\*) On the MPTKR-I, the knife system is optional. The MPTKR-I Ex includes the knife system.

## SERVICE AND MAINTENANCE

Recommended service interval/oil change	Maximum 2,000 operating hours/minimum once a year
Motor	Lifetime lubricated bearings
Oil chamber	Periodic oil change

## SURFACE TREATMENT

Machinery enamel: RAL 9005 (Jet Black)	Jet Black
2-component coating: RAL 7005 (Mouse Grey) (optional)	Mouse Grey

## MONITORING FUNCTIONS

Thermistor 284 °F

Moisture detection system (optional)

**ELECTRICAL DATA**

Motor type	3-phase AC motor
Nominal voltage	460 V
Minimum voltage allowed	415 V
Nominal frequency	60 Hz
Suitable for VFD-operation	Yes
Cage class	IP 55
Insulation class	F

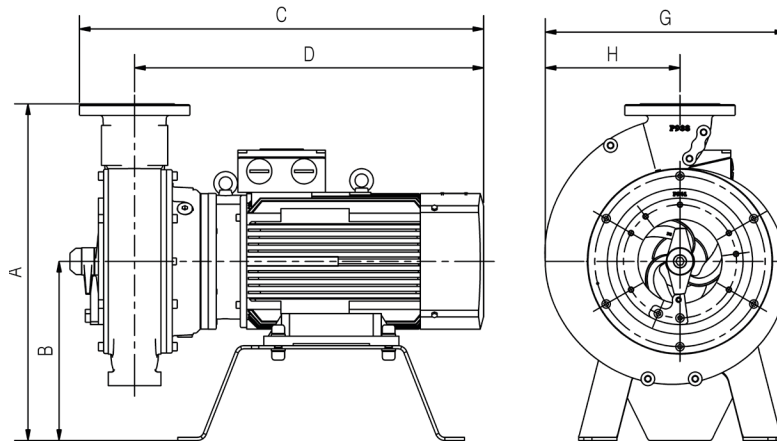
Model	Nominal power	Motor	Full load current (460 V)	Connection method		Start current (DOL)	cos phi	Efficiency (100%)
	[HP]	[rpm]	[A]	[V]	Y/Δ	[A]		[%]
MPTKR-I 65 3.6 HP-1800 rpm	3.6	1720	5.3	460	Y	34	0.75	81.0
MPTKR-I 80 9.0 HP-1800 rpm	9.0	1745	11.0	460	Δ	72	0.88	86.0
MPTKR-I 105 17.9 HP-1800 rpm	17.9	1755	22.0	460	Δ	152	0.84	88.4
MPTKR-I 105 30.2 HP-1800 rpm	30.2	1760	36.0	460	Δ	241	0.85	90.0
MPTKR-I 105 35.4 HP-1800 rpm	35.4	1765	43.5	460	Δ	283	0.83	90.5
MPTKR-I 105 48.9 HP-1800 rpm	48.9	1765	59.0	460	Δ	413	0.84	91.5

**ELECTRICAL DATA**

Motor type	3-phase AC motor
Nominal voltage	460 V
Minimum voltage allowed	415 V
Nominal frequency	60 Hz
Suitable for VFD-operation	Yes
Cage class	IP 55
Insulation class	F

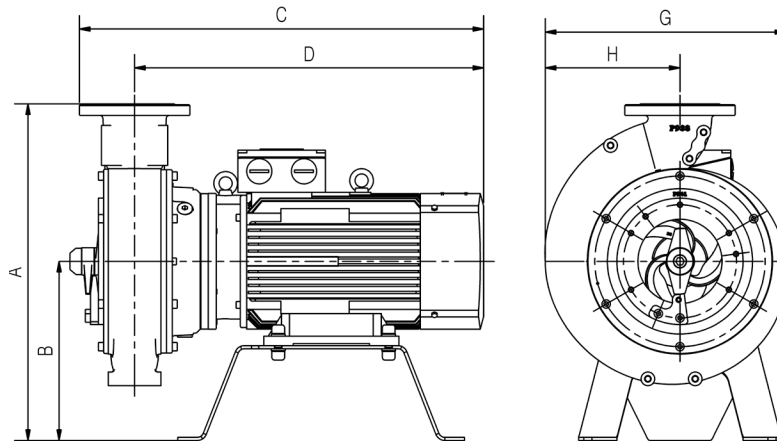
Model	Item number	Nominal power	Motor	Full load current (460 V)	Connection method		Start current (DOL)	cos phi	Efficiency (100%)
		[HP]	[rpm]	[A]	[V]	Y/Δ	[A]		[%]
MPTKR-I 65 17.9 HP-3600 rpm	2522211	17.9	3480	20.5	460	Δ	144	0.90	88.0
MPTKR-I 65 30.2 HP-3600 rpm	2522213	30.2	3520	33.0	460	Δ	238	0.92	90.5
MPTKR-I 80 30.2 HP-3600 rpm	2522218	30.2	3520	33.0	460	Δ	238	0.92	90.5
MPTKR-I 80 35.4 HP-3600 rpm	2522222	35.4	3535	38.5	460	Δ	270	0.92	92.0

## OVERALL DIMENSIONS



Model	A [inch]	B [inch]	C [inch]	D [inch]	G [inch]	H [inch]	Weight [lb]
MPTKR-I 65 3.6 HP-1800 rpm	17.9	9.8	19.3	16.1	12.6	6.9	121
MPTKR-I 80 9.0 HP-1800 rpm	20.6	11.0	25.0	21.3	14.7	8.1	220
MPTKR-I 105 17.9 HP-1800 rpm	25.2	13.4	28.4	24.2	18.1	9.8	392
MPTKR-I 105 30.2 HP-1800 rpm	25.2	13.4	28.7	24.6	18.1	9.8	503
MPTKR-I 105 35.4 HP-1800 rpm	25.2	13.4	31.3	27.2	18.1	9.8	683
MPTKR-I 105 48.9 HP-1800 rpm	25.2	13.4	31.3	27.2	18.1	9.8	794

**OVERALL DIMENSIONS**



Model	Item number	A [inch]	B [inch]	C [inch]	D [inch]	G [inch]	H [inch]	Weight [lb]
MPTKR-I 65 17.9 HP-3600 rpm	2522211	21.5	13.4	25.7	22.5	12.6	6.9	231
MPTKR-I 65 30.2 HP-3600 rpm	2522213	21.5	13.4	27.4	24.3	12.6	6.9	342
MPTKR-I 80 30.2 HP-3600 rpm	2522218	24.5	15.0	28.3	24.6	14.6	8.1	452
MPTKR-I 80 35.4 HP-3600 rpm	2522222	24.5	15.0	29.9	26.1	14.6	8.1	569

We reserve the right to make technical changes.